

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

BECK BRANCH, LLC,

Plaintiff,

v.

OATH INC.,

Defendant.

CIVIL ACTION NO.

JURY TRIAL DEMANDED

ORIGINAL COMPLAINT FOR PATENT INFRINGEMENT

1. This is an action for patent infringement in which Beck Branch, LLC makes the following allegations against Oath Inc.

PARTIES

2. Plaintiff Beck Branch, LLC (“Plaintiff”) is a Texas limited liability company with its principal place of business at 101 E. Park Blvd., Suite 600, Plano, TX 75074.

3. On information and belief, Oath Inc. (“Defendant” or “Oath”) is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business at 770 Broadway, 4th Floor, New York, NY 10003.

JURISDICTION AND VENUE

4. This action arises under the patent laws of the United States, Title 35 of the United States Code. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

5. Venue is proper in this district under 28 U.S.C. §§ 1391(c) and 1400(b). Oath is a Delaware corporation, and, thus, resides in Delaware for purposes of venue.

6. Defendant is subject to this Court’s specific and general personal jurisdiction by virtue of the fact that Defendant is a Delaware corporation.

COUNT I
INFRINGEMENT OF U.S. PATENT NO. 6,873,620 (AOL)

7. Plaintiff is the owner of United States Patent No. 6,873,620 (“the ‘620 patent”) entitled “Communication Server Including Virtual Gateway to Perform Protocol Conversion and Communication System Incorporating the Same.” The ‘620 Patent issued on March 29, 2005. A true and correct copy of the ‘620 Patent is attached as Exhibit A.

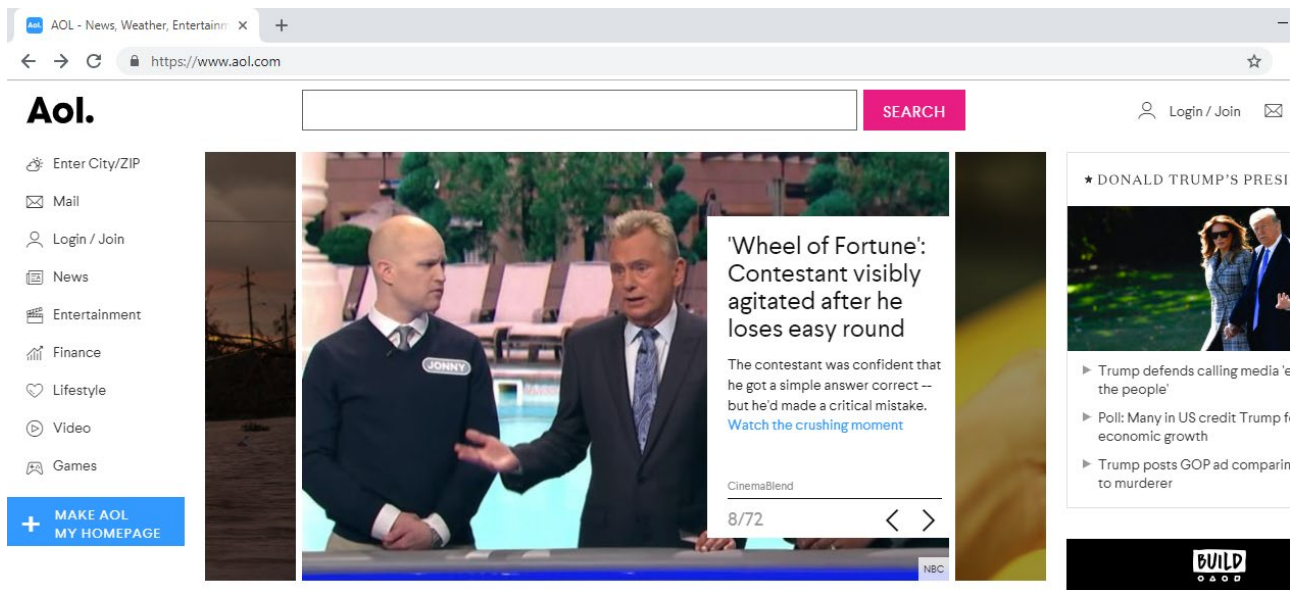
8. Defendant owns, uses, operates, advertises, controls, sells, and otherwise provides products and/or services that infringe the ‘620 patent. The ‘620 patent provides, among other things, “A communication server acting as a gateway for the transmission of messages between two virtual devices communicating with networks implementing different protocols, said communication server comprising: a knowledge base comprising a registry identifying each physical device registered to deliver messages for transmission between said virtual devices and through said gateway, a logical table identifying each registered connection available between physical devices and protocol conversion information required for each registered connection to convert messages of one protocol to a different protocol and a dynamic database identifying the current status of each actual connection between physical devices; and a virtual gateway accessing said knowledge base for protocol conversion information upon receipt of a message to be transmitted between said virtual devices and converting the protocol of said message to a protocol compatible with the network to which said message is being sent wherein said virtual gateway updates the protocol conversion information and the current status information in said knowledge base based on message traffic therethrough.”

9. Defendant directly and/or through intermediaries, made, has made, used, imported, provided, supplied, distributed, sold, and/or offered for sale products and/or services that infringed one or more claims of the ‘620 patent, including at least Claim 23, in this district and elsewhere in the United States. By making, using, importing, offering for sale, and/or selling such products and services, and all like products and services, Defendant has injured Plaintiff and is thus liable for infringement of the ‘620 patent pursuant to 35 U.S.C. § 271.

10. AOL is a subdivision of Defendant.

11. Based on present information and belief, AOL makes, uses, sells and/or offers for sale a communication server acting as a gateway for the transmission of messages between two virtual devices communicating with networks implementing different protocols. For example,

AOL provides web based electronic mail (e-mail) software to exchange messages between sender (e-mail client) and receiver (e-mail client) using webmail services via the AOL server and/or AOL.com server. When an e-mail client creates and send an e-mail using AOL software (which when installed on a computer, smartphone or other computing device comprise one or more “virtual devices”), the e-mail client uses the AOL server and/or AOL.com server to send an e-mail using Simple Mail Transfer Protocol (SMTP) via AOL server and/or AOL.com server (“communication server”) to authenticate the sender. The AOL server and/or AOL.com server converts the protocol from SMTP to Internet Message Access Protocol (IMAP) which is used by e-mail client at receiver’s end to retrieve the messages from the server. The messages between e-mail clients at sender end to the e-mail clients at receiver end are transmitted via the AOL server and/or AOL.com server (“gateway”).



Source: <https://www.aol.com/>

AOL - login

https://login.aol.com/?done=https%3A%2F%2Fapi.login.aol.com%2Foauth2%2Frequest_auth%3Fstate%3DWyJneVjYQU1RSFRVQjBfXzRBY3FNR1BNdnV1VGhvVUhlR0Rwb...

Aol.

Sign in

Username or Email

Next

☐ Stay signed in [Trouble signing in?](#)

or continue with

[f](#) [g](#) [Y](#)

Don't have an account? [Sign up](#)

Source: <https://login.aol.com/>

AOL

https://login.aol.com/account/create?specId=yidReg

Aol.

Sign up

First name Last name

Email address @aol.com

Password

+1 Mobile phone number

Birth Month Day Year

Gender (optional)

By clicking "Continue", you agree to the [Terms \(Updated\)](#) and [Privacy Policy \(Updated\)](#)

Continue

Source: <https://login.aol.com/account/create?specId=yidReg>

The screenshot shows the AOL Help website. The browser address bar displays the URL: <https://help.aol.com/articles/how-do-i-use-other-email-applications-to-send-and-receive-my-aol-mail>. The page title is "Use POP or IMAP to sync AOL Mail on a third-party app or download your email". The article content includes a sub-header "Use POP or IMAP to sync AOL Mail on a third-party app or download your email" and a brief introduction: "Learn how to sync AOL Mail with a third-party app, using POP or IMAP, to send and receive emails in the app or download a copy of your email." It also mentions "Verizon.net email users" and provides instructions on using third-party email apps, including POP and IMAP protocols. The article is dated April 30, 2018.

Source: <https://help.aol.com/articles/how-do-i-use-other-email-applications-to-send-and-receive-my-aol-mail>

The screenshot shows the same AOL Help article, but scrolled down to the "AOL Mail POP and IMAP settings" section. This section provides instructions on updating email app settings and includes a table of server and port settings for POP3 and IMAP protocols.

Protocol	Server Settings	Port Settings
POP 3	Incoming mail server (POP3): pop.aol.com	POP3-995-SSL
	Outgoing mail server (SMTP): smtp.aol.com	SMTP-465-SSL
IMAP	Incoming mail server (IMAP): imap.aol.com	IMAP-993-SSL
	Outgoing mail server (SMTP): smtp.aol.com	SMTP-465-SSL

Source: <https://help.aol.com/articles/how-do-i-use-other-email-applications-to-send-and-receive-my-aol-mail>

The screenshot shows a web browser window with the URL <https://help.aol.com/articles/what-is-the-difference-between-pop3-and-imap>. The page has a dark sidebar on the left with the AOL logo and navigation links: PRODUCTS, SHORTCUTS, SUPPORT OPTIONS, and AOL PLANS. The main content area has a white background with the title 'What is the difference between POP3 and IMAP?' in bold. Below the title is a small graphic of a pink envelope with the word 'MAIL' on it, followed by the text: 'Debating whether to use POP3 or IMAP? Learn about the difference between the two, and decide which one works better for your needs.' The article text explains that POP3 and IMAP are two different methods used to access mail from a 3rd party email client or software. It states that each method downloads email data from AOL to your device or software, but they differ in where the emails are stored. It then asks the user to review the differences and choose the protocol that's right for their needs, providing a link to 'configure the email client with AOL settings.' The article is divided into two sections: 'IMAP (Internet Messaging Access Protocol)' and 'POP3 (Post Office Protocol)'. Each section has a bulleted list of features.

What is the difference between POP3 and IMAP?

Debating whether to use POP3 or IMAP? Learn about the difference between the two, and decide which one works better for your needs.

POP3 and IMAP are 2 different methods used to access mail from a 3rd party email client or software. Each method downloads email data from AOL to your device or software, however, they differ in where the emails are stored.

Review the differences and choose the protocol that's right for your needs. Whether you decide on POP3 or IMAP to access your mail, you'll need to [configure the email client with AOL settings](#).

IMAP (Internet Messaging Access Protocol)

- Emails are stored on the server.
- Sent messages are stored on the server.
- Messages can be synced and accessed across multiple devices.

POP3 (Post Office Protocol)

- Emails are stored on a single device.
- Sent messages are stored on a single device.
- Emails can only be accessed from a single device.

Source: <https://help.aol.com/articles/what-is-the-difference-between-pop3-and-imap>

1.1. Transport of Electronic Mail

The objective of the Simple Mail Transfer Protocol (SMTP) is to transfer mail reliably and efficiently.

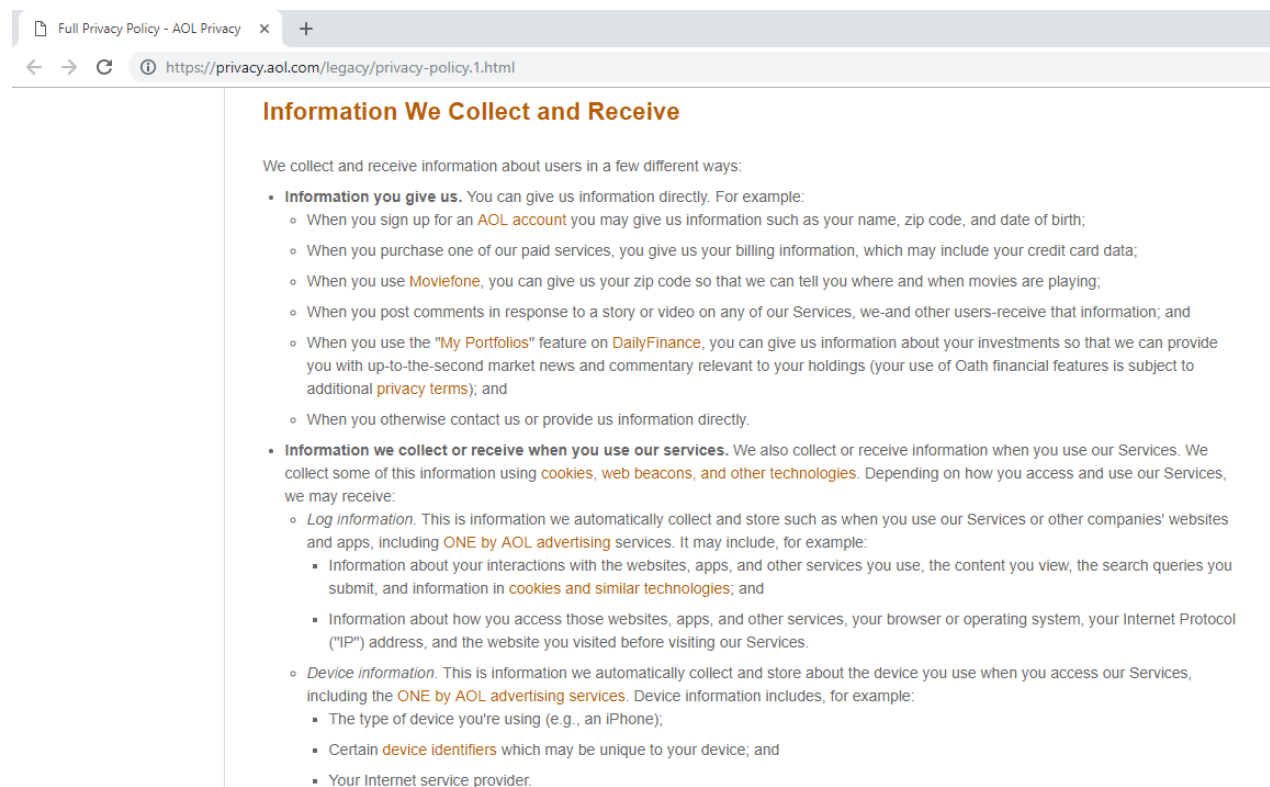
SMTP is independent of the particular transmission subsystem and requires only a reliable ordered data stream channel. While this document specifically discusses transport over TCP, other transports are possible. Appendices to [RFC 821](#) [1] describe some of them.

An important feature of SMTP is its capability to transport mail across multiple networks, usually referred to as "SMTP mail relaying" (see [Section 3.6](#)). A network consists of the mutually-TCP-accessible hosts on the public Internet, the mutually-TCP-accessible hosts on a firewall-isolated TCP/IP Intranet, or hosts in some other LAN or WAN environment utilizing a non-TCP transport-level protocol. Using SMTP, a process can transfer mail to another process on the same network or to some other network via a relay or gateway process accessible to both networks.

In this way, a mail message may pass through a number of intermediate relay or gateway hosts on its path from sender to ultimate recipient. The Mail eXchanger mechanisms of the domain name system ([RFC 1035](#) [2], [RFC 974](#) [12], and [Section 5](#) of this document) are used to identify the appropriate next-hop destination for a message being transported.

Source: <https://tools.ietf.org/html/rfc5321#section-1>, page 4

12. Based on present information and belief, AOL makes, uses, sells and/or offers for sale a knowledge base comprising a registry identifying each physical device registered to deliver messages for transmission between said virtual devices and through said gateway. For example, AOL and/or its customers utilize AOL server and/or AOL.com server to send and/or receive e-mails which comprises a knowledge base log and device information (“registry”) to identify the registered physical devices. Further, the server transmit messages between e-mail clients at sender end to the e-mail clients at receiver end via the AOL server and/or AOL.com server (“gateway”).



The screenshot shows a web browser window with the address bar displaying <https://privacy.aol.com/legacy/privacy-policy.1.html>. The page content is titled "Information We Collect and Receive" in orange. Below the title, it states: "We collect and receive information about users in a few different ways:" followed by two main bullet points.

- **Information you give us.** You can give us information directly. For example:
 - When you sign up for an **AOL account** you may give us information such as your name, zip code, and date of birth;
 - When you purchase one of our paid services, you give us your billing information, which may include your credit card data;
 - When you use **Moviefone**, you can give us your zip code so that we can tell you where and when movies are playing;
 - When you post comments in response to a story or video on any of our Services, we-and other users-receive that information; and
 - When you use the "My Portfolios" feature on **DailyFinance**, you can give us information about your investments so that we can provide you with up-to-the-second market news and commentary relevant to your holdings (your use of Oath financial features is subject to additional **privacy terms**); and
 - When you otherwise contact us or provide us information directly.
- **Information we collect or receive when you use our services.** We also collect or receive information when you use our Services. We collect some of this information using **cookies, web beacons, and other technologies**. Depending on how you access and use our Services, we may receive:
 - **Log information.** This is information we automatically collect and store such as when you use our Services or other companies' websites and apps, including **ONE by AOL advertising services**. It may include, for example:
 - Information about your interactions with the websites, apps, and other services you use, the content you view, the search queries you submit, and information in **cookies and similar technologies**; and
 - Information about how you access those websites, apps, and other services, your browser or operating system, your Internet Protocol ("IP") address, and the website you visited before visiting our Services.
 - **Device information.** This is information we automatically collect and store about the device you use when you access our Services, including the **ONE by AOL advertising services**. Device information includes, for example:
 - The type of device you're using (e.g., an iPhone);
 - Certain **device identifiers** which may be unique to your device; and
 - Your Internet service provider.

Source: <https://privacy.aol.com/legacy/privacy-policy.1.html>

Abstract

The Internet Message Access Protocol, Version 4rev1 (IMAP4rev1) allows a client to access and manipulate electronic mail messages on a server. IMAP4rev1 permits manipulation of mailboxes (remote message folders) in a way that is functionally equivalent to local folders. IMAP4rev1 also provides the capability for an offline client to resynchronize with the server.

IMAP4rev1 includes operations for creating, deleting, and renaming mailboxes, checking for new messages, permanently removing messages, setting and clearing flags, [RFC 2822](#) and [RFC 2045](#) parsing, searching, and selective fetching of message attributes, texts, and portions thereof. Messages in IMAP4rev1 are accessed by the use of numbers. These numbers are either message sequence numbers or unique identifiers.

IMAP4rev1 supports a single server. A mechanism for accessing configuration information to support multiple IMAP4rev1 servers is discussed in [RFC 2244](#).

IMAP4rev1 does not specify a means of posting mail; this function is handled by a mail transfer protocol such as [RFC 2821](#).

Source: <https://tools.ietf.org/html/rfc3501#section-2.1>

1.1. Transport of Electronic Mail

The objective of the Simple Mail Transfer Protocol (SMTP) is to transfer mail reliably and efficiently.

SMTP is independent of the particular transmission subsystem and requires only a reliable ordered data stream channel. While this document specifically discusses transport over TCP, other transports are possible. Appendices to [RFC 821](#) [1] describe some of them.

An important feature of SMTP is its capability to transport mail across multiple networks, usually referred to as "SMTP mail relaying" (see [Section 3.6](#)). A network consists of the mutually-TCP-accessible hosts on the public Internet, the mutually-TCP-accessible hosts on a firewall-isolated TCP/IP Intranet, or hosts in some other LAN or WAN environment utilizing a non-TCP transport-level protocol. Using SMTP, a process can transfer mail to another process on the same network or to some other network via a relay or gateway process accessible to both networks.

In this way, a mail message may pass through a number of intermediate relay or gateway hosts on its path from sender to ultimate recipient. The Mail eXchanger mechanisms of the domain name system ([RFC 1035](#) [2], [RFC 974](#) [12], and [Section 5](#) of this document) are used to identify the appropriate next-hop destination for a message being transported.

Source: <https://tools.ietf.org/html/rfc5321#section-1>, page 4

2. Protocol Overview

2.1. Link Level

The IMAP4rev1 protocol assumes a reliable data stream such as that provided by TCP. When TCP is used, an IMAP4rev1 server listens on port 143.

2.2. Commands and Responses

An IMAP4rev1 connection consists of the establishment of a client/server network connection, an initial greeting from the server, and client/server interactions. These client/server interactions consist of a client command, server data, and a server completion result response.

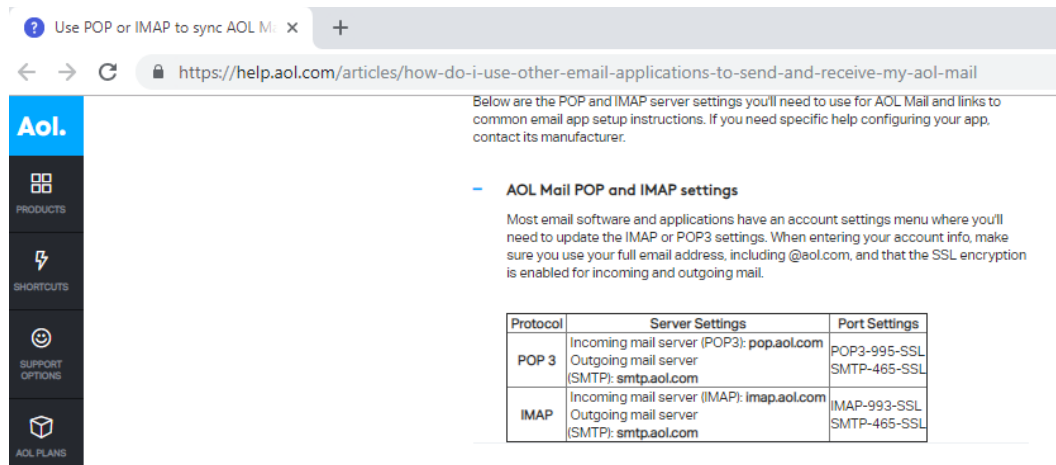
All interactions transmitted by client and server are in the form of lines, that is, strings that end with a CRLF. The protocol receiver of an IMAP4rev1 client or server is either reading a line, or is reading a sequence of octets with a known count followed by a line.

2.2.1. Client Protocol Sender and Server Protocol Receiver

The client command begins an operation. Each client command is prefixed with an identifier (typically a short alphanumeric string, e.g., A0001, A0002, etc.) called a "tag". A different tag is generated by the client for each command.

Source: <https://tools.ietf.org/html/rfc3501#section-2.1>, page 5

13. Based on information and belief, AOL makes, uses, sells and/or offers for sale a logical table identifying each registered connection available between physical devices and protocol conversion information required for each registered connection to convert messages of one protocol to a different protocol. Upon information and belief, AOL and/or its customers utilize AOL server and/or AOL.com server which comprises a logical table to identify the type of connection and selects AOL server and/or AOL.com server gateway to convert messages from SMTP to IMAP.



Source: <https://help.aol.com/articles/how-do-i-use-other-email-applications-to-send-and-receive-my-aol-mail>

14. Based on present information and belief, AOL makes, uses, sells and/or offers for sale a dynamic database identifying the current status of each actual connection between physical devices. Upon information and belief, AOL and/or its customers utilize AOL server and/or AOL.com server which comprises a dynamic database to identify the current status of connection between the physical devices (including IP phones and the installation computers).

15. Based on present information and belief, AOL makes, uses, sells and/or offers for sale a virtual gateway accessing said knowledge base for protocol conversion information upon receipt of a message to be transmitted between said virtual devices. For example, AOL and/or its customers utilize AOL server and/or AOL.com server comprising a virtual gateway which uses the AOL server and/or AOL.com server as a gateway for protocol conversion upon receiving the message to be transmitted between e-mail clients at sender end to the e-mail clients at receiver end via the AOL server and/or AOL.com server (“gateway”).

16. Based on present information and belief, AOL makes, uses, sells and/or offers for sale a virtual gateway converting the protocol of said message to a protocol compatible with the network to which said message is being sent. For example, AOL and/or its customers utilize AOL server and/or AOL.com server comprising a gateway which converts the SMTP protocol of the messages sent from AOL software at sender’s end (e-mail client) to the IMAP protocol used at receiver’s end (e-mail client).

17. Based on present information and belief, AOL makes, uses, sells and/or offers for sale a virtual gateway converting the protocol of said message to a protocol compatible with the

network to which said message is being sent. For example, AOL and/or its customers utilize AOL server and/or AOL.com server comprising a gateway which converts the SMTP protocol of the messages sent from AOL software at sender's end (e-mail client) to the IMAP protocol used at receiver's end (e-mail client).

COUNT II
INFRINGEMENT OF U.S. PATENT NO. 6,873,620 (YAHOO)

18. Plaintiff is the owner of United States Patent No. 6,873,620 ("the '620 patent") entitled "Communication Server Including Virtual Gateway to Perform Protocol Conversion and Communication System Incorporating the Same." The '620 Patent issued on March 29, 2005. A true and correct copy of the '620 Patent is attached as Exhibit A.

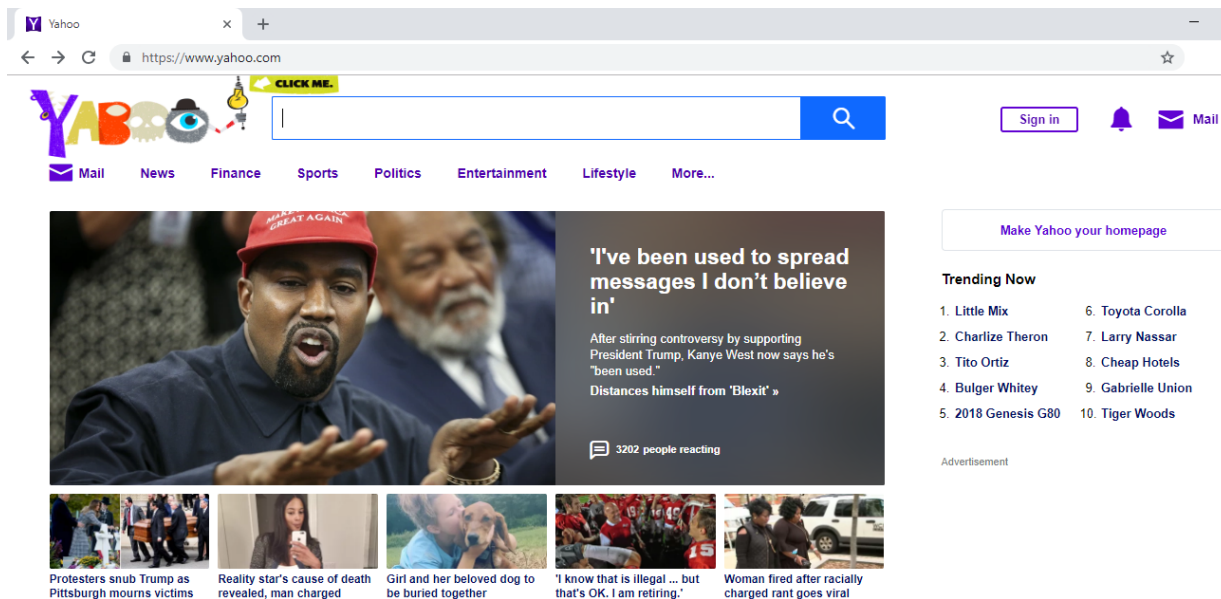
19. Defendant owns, uses, operates, advertises, controls, sells, and otherwise provides products and/or services that infringe the '620 patent. The '620 patent provides, among other things, "A communication server acting as a gateway for the transmission of messages between two virtual devices communicating with networks implementing different protocols, said communication server comprising: a knowledge base comprising a registry identifying each physical device registered to deliver messages for transmission between said virtual devices and through said gateway, a logical table identifying each registered connection available between physical devices and protocol conversion information required for each registered connection to convert messages of one protocol to a different protocol and a dynamic database identifying the current status of each actual connection between physical devices; and a virtual gateway accessing said knowledge base for protocol conversion information upon receipt of a message to be transmitted between said virtual devices and converting the protocol of said message to a protocol compatible with the network to which said message is being sent wherein said virtual gateway updates the protocol conversion information and the current status information in said knowledge base based on message traffic therethrough."

20. Defendant directly and/or through intermediaries, made, has made, used, imported, provided, supplied, distributed, sold, and/or offered for sale products and/or services that infringed one or more claims of the '620 patent, including at least Claim 23, in this district and elsewhere in the United States. By making, using, importing, offering for sale, and/or selling such products and

services, and all like products and services, Defendant has injured Plaintiff and is thus liable for infringement of the '620 patent pursuant to 35 U.S.C. § 271.

21. Yahoo is a subdivision of Defendant.

22. Based on present information and belief, Yahoo makes, uses, sells and/or offers for sale a communication server acting as a gateway for the transmission of messages between two virtual devices communicating with networks implementing different protocols. For example, Yahoo provides web based electronic mail (e-mail) software to exchange messages between sender (e-mail client) and receiver (e-mail client) using webmail services via the Yahoo server and/or Yahoo.com server. When an e-mail client creates and send an e-mail using Yahoo mail software (which when installed on a computer, smartphone or other computing device comprise one or more "virtual devices"), the e-mail client uses the Yahoo server and/or Yahoo.com server to send an e-mail using Simple Mail Transfer Protocol (SMTP) via Yahoo server and/or Yahoo.com server ("communication server") to authenticate the sender. The Yahoo server and/or Yahoo.com server converts the protocol from SMTP to Internet Message Access Protocol (IMAP) which is used by e-mail client at receiver's end to retrieve the messages from the server. The messages between e-mail clients at sender end to the e-mail clients at receiver end are transmitted via the Yahoo server and/or Yahoo.com server ("gateway").



Source: <https://www.yahoo.com/>

YAHOO!

Yahoo makes it easy to enjoy what matters most in your world.

Best in class Yahoo Mail, breaking local, national and global news, finance, sports, music, movies and more. You get more out of the web, you get more out of life.

YAHOO!

Sign in

Enter your email

Next

☒ Stay signed in [Trouble signing in?](#)

Don't have an account? [Sign up](#)

Source: <https://login.yahoo.com/config/login?.src=fpctx&intl=us&lang=en-US&done=https%3A%2F%2Fwww.yahoo.com>

YAHOO!

Sign up

First name Last name

Email address @yahoo.com

[I'd rather use my own email address](#)

Password

+1 Mobile phone number

Birth Month Day Year

Gender (optional)

By clicking "Continue", you agree to the [Terms \(Updated\)](#) and [Privacy Policy \(Updated\)](#)

Continue

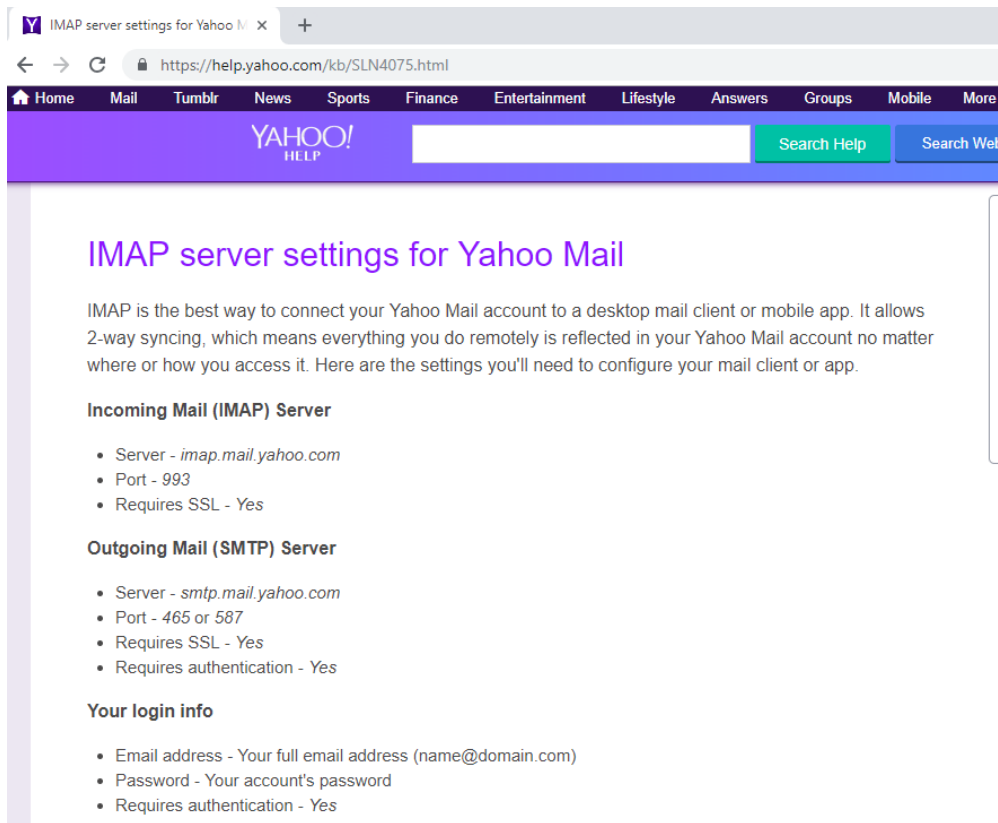
Already have an account? [Sign in](#)

Source: <https://login.yahoo.com/account/create?.src=fpctx&intl=us&lang=en-US&done=https%3A%2F%2Fwww.yahoo.com&specId=yidReg>

Communications

Yahoo Mail is a primary driver of engagement across our user offerings. Yahoo Mail connects users to the people and content most important to them across mobile and desktop. We support connecting external mail providers (such as Gmail, AOL, and Outlook) for users to manage multiple accounts from the Yahoo Mail client. Each Yahoo Mail account comes with one terabyte of free storage and is integrated with contacts, calendar, and messaging (see Yahoo Messenger section below). Our newly redesigned mobile app has new user-centric features including account key, compose assistant, document preview, and smart contacts. In 2016, we plan to invest in Yahoo Mail to grow DAUs and increase engagement by improving speed and stability, as well as adding features that make it easier for users to share, search, and connect through the platform.

Source: <http://files.shareholder.com/downloads/YHOO/1485316140x0xS1193125-16-483790/1011006/1193125-16-483790.pdf>



IMAP server settings for Yahoo Mail

IMAP is the best way to connect your Yahoo Mail account to a desktop mail client or mobile app. It allows 2-way syncing, which means everything you do remotely is reflected in your Yahoo Mail account no matter where or how you access it. Here are the settings you'll need to configure your mail client or app.

Incoming Mail (IMAP) Server

- Server - *imap.mail.yahoo.com*
- Port - 993
- Requires SSL - Yes

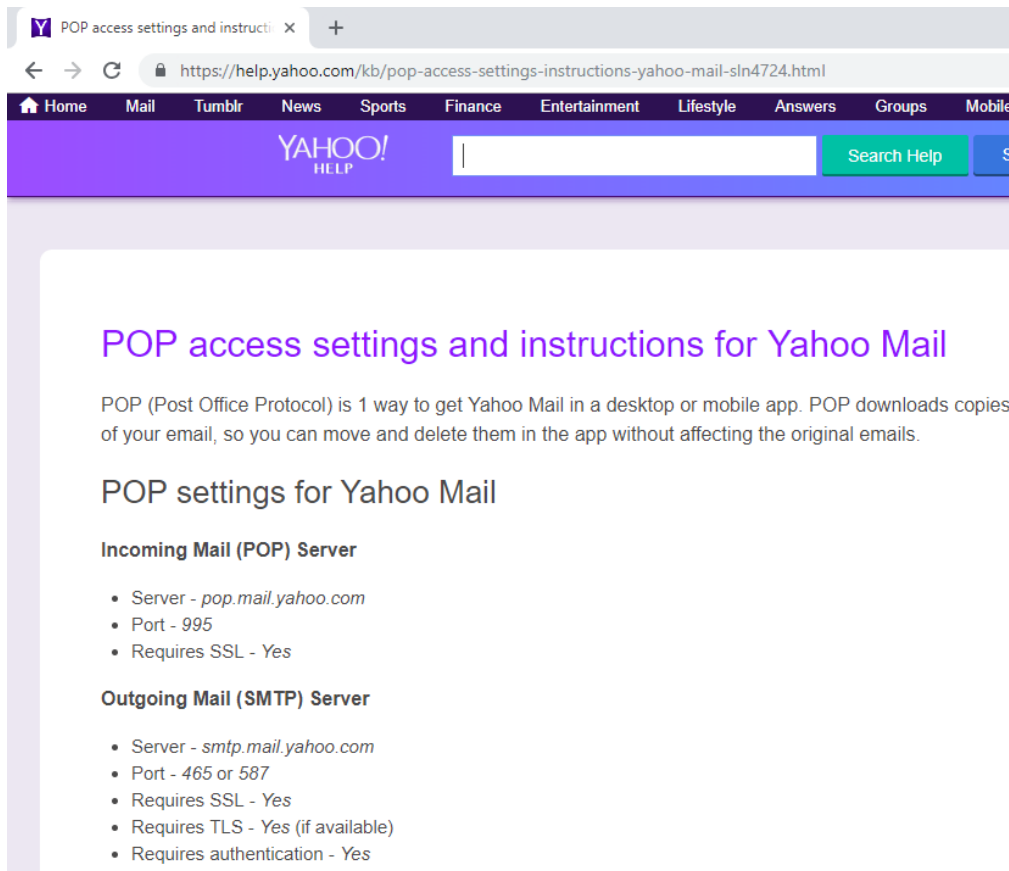
Outgoing Mail (SMTP) Server

- Server - *smtp.mail.yahoo.com*
- Port - 465 or 587
- Requires SSL - Yes
- Requires authentication - Yes

Your login info

- Email address - Your full email address (name@domain.com)
- Password - Your account's password
- Requires authentication - Yes

Source: <https://help.yahoo.com/kb/SLN4075.html>



Source: <https://help.yahoo.com/kb/pop-access-settings-instructions-yahoo-mail-sln4724.html>

1.1. Transport of Electronic Mail

The objective of the Simple Mail Transfer Protocol (SMTP) is to transfer mail reliably and efficiently.

SMTP is independent of the particular transmission subsystem and requires only a reliable ordered data stream channel. While this document specifically discusses transport over TCP, other transports are possible. Appendices to [RFC 821](#) [1] describe some of them.

An important feature of SMTP is its capability to transport mail across multiple networks, usually referred to as "SMTP mail relaying" (see [Section 3.6](#)). A network consists of the mutually-TCP-accessible hosts on the public Internet, the mutually-TCP-accessible hosts on a firewall-isolated TCP/IP Intranet, or hosts in some other LAN or WAN environment utilizing a non-TCP transport-level protocol. Using SMTP, a process can transfer mail to another process on the same network or to some other network via a relay or gateway process accessible to both networks.

In this way, a mail message may pass through a number of intermediate relay or gateway hosts on its path from sender to ultimate recipient. The Mail eXchanger mechanisms of the domain name system ([RFC 1035](#) [2], [RFC 974](#) [12], and [Section 5](#) of this document) are used to identify the appropriate next-hop destination for a message being transported.

Source: <https://tools.ietf.org/html/rfc5321#section-1>, page 4

23. Based on present information and belief, Yahoo makes, uses, sells and/or offers for sale a knowledge base comprising a registry identifying each physical device registered to deliver messages for transmission between said virtual devices and through said gateway. For example, Yahoo and/or its customers utilize Yahoo server and/or Yahoo.com server to send and/or receive e-mails which comprises a knowledge base user log data and cookies (“registry”) to identify the registered physical devices. The server transmits messages between e-mail clients at sender end to the e-mail clients at receiver end via the Yahoo server and/or Yahoo.com server (“gateway”).

Data Storage and Anonymization

In order to provide products and services, Yahoo collects and stores information from user account registration and site usage. We generally refer to the information that we collect in connection with site usage as “user log data”.

Yahoo’s policy is to de-identify search user log data within 18 months of collection, with limited exceptions to meet legal obligations.

In addition to the other purposes for which we [collect information](#), other types of log data (ie not relating to search) (such as ad views, ad clicks, page views and page clicks) are retained for a longer period in order to power innovative product development, provide personalized and customized services, and better enable our security systems to detect and defend against fraudulent activity. Yahoo takes additional steps so that data collected and used to customize interest based advertising (along with some content) on Yahoo are not associated with personally identifiable information. We describe the data we store, and our processes in more detail [here](#).

You can also modify information you have provided to Yahoo through the Yahoo [products or services](#) you may use.

Account Information

- When you register with Yahoo or submit information to Yahoo, a temporary copy of that information is routinely made to prevent accidental loss of your information through a computer malfunction or human error.
- Yahoo keeps your account information active in our user registration databases in order to provide immediate access to your personalization preferences each time you visit Yahoo.
- If you ask Yahoo to delete your Yahoo account, in most cases your account will be deactivated and then deleted from our user registration database in approximately 40 days with longer hold periods for accounts registered in: Australia or New Zealand (approx. 90 days); Brazil or Taiwan (approx. 180 days). This delay is necessary to discourage users from engaging in fraudulent activity.
- Please note that any information that we have copied may remain in back-up storage for some period of time after your deletion request. This may be the case even though no account information remains in our active user databases.

Source: <https://policies.yahoo.com/xa/en/yahoo/privacy/topics/datastorage/index.htm>

Servers Log Files

- The Yahoo computers (called "servers") that send your web pages and advertising banners process and store an enormous amount of information every day. These computer records are called "log files".
- Log files are used for analysis, research, auditing, and other purposes, as described above. After this information has been used, it is stored and is inaccessible. Until the information is stored, your Yahoo ID may remain in our active server log files.

Anonymization/de-identification

- Anonymization is a process of removing or replacing personal identifiers in data records so that the resulting data is no longer personally identifiable. This is also referred to as de-identification. We use these terms interchangeably.
- Yahoo uses a multi-step process to replace, truncate, or delete identifiers in order to de-identify data. We are committed to continuous improvements and implementation of our data protection and de-identification measures.

Anonymization

- Yahoo's anonymization policy applies only to search log data.
- Yahoo stores this data in an identifiable form for up to 18 months.
- IP addresses within search user log data will be anonymized or deleted within 6 months from the time of collection.

Source: <https://policies.yahoo.com/xa/en/yahoo/privacy/topics/datastorage/index.htm>

Y Yahoo Cookies

← → ↻ <https://policies.yahoo.com/xa/en/yahoo/privacy/topics/cookies/index.htm>

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YAHOO!

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Topics
Products
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Yahoo Cookies

Yahoo may set and read cookies and device identifiers when you visit our websites, use our products or visit a website where Yahoo provides ads, content or analytics. A cookie is a small piece of information that is stored on a computer for the purpose of identifying that browser during interaction on websites. Device identifiers are assembled from available system elements which could include IP address, user agent information (browser version, OS type and version), or device-generated identifiers such as Apple's ID for Advertisers, Apple's ID for Vendors, Google's Android ID, or Google's Play Store Ad ID. Cookies and similar technologies may be used to remember items such as identifiers and user preferences and to identify and recognize Yahoo users. A website may set a cookie to the browser if the browser's preferences allow it. A browser only permits a website to access the cookies it has set, not those set by other websites.

Yahoo's Practices Regarding Cookies and Similar Technologies

Yahoo may use cookies and similar technologies for a number of purposes, including to:

- Access your information when you "sign in" so we can provide you with customized content or remember the last page you visited in a Yahoo product or service.
 - Information that Yahoo collects related to your activities and interests is maintained by Yahoo on its servers and is associated with Yahoo cookies and similar technologies. You can learn more about Yahoo's [data retention and storage practices](#) here.
- Maintain your settings and identity while you are using Yahoo products or services.
 - When you log in to your Yahoo account, a cookie and/or device ID that links to information about your interests is placed on the computer or device you are using. This allows Yahoo to associate your interests, activities, preferences, and prior Yahoo use if you log in to your Yahoo account on multiple devices. This means that your browsing habits or other activity on your work computer, library computer, or other device when logged in, can inform your experience on Yahoo when using your home computer or other device when logged in.
- Deliver [advertisements](#) and content relevant to your interests.
 - Yahoo collects and maintains information about your interests based on your web surfing activity when you are visiting the branded Yahoo network of websites, websites within the Yahoo Network, as well as other non-Yahoo web sites that we partner with.
 - Yahoo may use [web beacons](#) to collect and maintain information about your websurfing activity when you are visiting the branded Yahoo network of websites as well as other non-Yahoo websites.

Source: <https://policies.yahoo.com/xa/en/yahoo/privacy/topics/cookies/index.htm>

Abstract

The Internet Message Access Protocol, Version 4rev1 (IMAP4rev1) allows a client to access and manipulate electronic mail messages on a server. IMAP4rev1 permits manipulation of mailboxes (remote message folders) in a way that is functionally equivalent to local folders. IMAP4rev1 also provides the capability for an offline client to resynchronize with the server.

IMAP4rev1 includes operations for creating, deleting, and renaming mailboxes, checking for new messages, permanently removing messages, setting and clearing flags, [RFC 2822](#) and [RFC 2045](#) parsing, searching, and selective fetching of message attributes, texts, and portions thereof. Messages in IMAP4rev1 are accessed by the use of numbers. These numbers are either message sequence numbers or unique identifiers.

IMAP4rev1 supports a single server. A mechanism for accessing configuration information to support multiple IMAP4rev1 servers is discussed in [RFC 2244](#).

IMAP4rev1 does not specify a means of posting mail; this function is handled by a mail transfer protocol such as [RFC 2821](#).

Source: <https://tools.ietf.org/html/rfc3501#section-2.1>, page6

1.1. Transport of Electronic Mail

The objective of the Simple Mail Transfer Protocol (SMTP) is to transfer mail reliably and efficiently.

SMTP is independent of the particular transmission subsystem and requires only a reliable ordered data stream channel. While this document specifically discusses transport over TCP, other transports are possible. Appendices to [RFC 821](#) [1] describe some of them.

An important feature of SMTP is its capability to transport mail across multiple networks, usually referred to as "SMTP mail relaying" (see [Section 3.6](#)). A network consists of the mutually-TCP-accessible hosts on the public Internet, the mutually-TCP-accessible hosts on a firewall-isolated TCP/IP Intranet, or hosts in some other LAN or WAN environment utilizing a non-TCP transport-level protocol. Using SMTP, a process can transfer mail to another process on the same network or to some other network via a relay or gateway process accessible to both networks.

In this way, a mail message may pass through a number of intermediate relay or gateway hosts on its path from sender to ultimate recipient. The Mail eXchanger mechanisms of the domain name system ([RFC 1035](#) [2], [RFC 974](#) [12], and [Section 5](#) of this document) are used to identify the appropriate next-hop destination for a message being transported.

Source: <https://tools.ietf.org/html/rfc5321#section-1>, page 4

2. Protocol Overview

2.1. Link Level

The IMAP4rev1 protocol assumes a reliable data stream such as that provided by TCP. When TCP is used, an IMAP4rev1 server listens on port 143.

2.2. Commands and Responses

An IMAP4rev1 connection consists of the establishment of a client/server network connection, an initial greeting from the server, and client/server interactions. These client/server interactions consist of a client command, server data, and a server completion result response.

All interactions transmitted by client and server are in the form of lines, that is, strings that end with a CRLF. The protocol receiver of an IMAP4rev1 client or server is either reading a line, or is reading a sequence of octets with a known count followed by a line.

2.2.1. Client Protocol Sender and Server Protocol Receiver

The client command begins an operation. Each client command is prefixed with an identifier (typically a short alphanumeric string, e.g., A0001, A0002, etc.) called a "tag". A different tag is generated by the client for each command.

Source: <https://tools.ietf.org/html/rfc3501#section-2.1>, page 5

Further, Yahoo server and/or Yahoo.com server also maintains a knowledge base comprising a registry identifying the phones and devices within the customers' network.

Data Storage and Anonymization

In order to provide products and services, Yahoo collects and stores information from user account registration and site usage. We generally refer to the information that we collect in connection with site usage as "user log data".

Yahoo's policy is to de-identify search user log data within 18 months of collection, with limited exceptions to meet legal obligations.

In addition to the other purposes for which we [collect information](#), other types of log data (ie not relating to search) (such as ad views, ad clicks, page views and page clicks) are retained for a longer period in order to power innovative product development, provide personalized and customized services, and better enable our security systems to detect and defend against fraudulent activity. Yahoo takes additional steps so that data collected and used to customize interest based advertising (along with some content) on Yahoo are not associated with personally identifiable information. We describe the data we store, and our processes in more detail [here](#).

You can also modify information you have provided to Yahoo through the Yahoo [products or services](#) you may use.

Account Information

- When you register with Yahoo or submit information to Yahoo, a temporary copy of that information is routinely made to prevent accidental loss of your information through a computer malfunction or human error.
- Yahoo keeps your account information active in our user registration databases in order to provide immediate access to your personalization preferences each time you visit Yahoo.
- If you ask Yahoo to delete your Yahoo account, in most cases your account will be deactivated and then deleted from our user registration database in approximately 40 days with longer hold periods for accounts registered in: Australia or New Zealand (approx. 90 days); Brazil or Taiwan (approx. 180 days). This delay is necessary to discourage users from engaging in fraudulent activity.
- Please note that any information that we have copied may remain in back-up storage for some period of time after your deletion request. This may be the case even though no account information remains in our active user databases.

Source: <https://policies.yahoo.com/xa/en/yahoo/privacy/topics/datastorage/index.htm>

Servers Log Files

- The Yahoo computers (called "servers") that send your web pages and advertising banners process and store an enormous amount of information every day. These computer records are called "log files".
- Log files are used for analysis, research, auditing, and other purposes, as described above. After this information has been used, it is stored and is inaccessible. Until the information is stored, your Yahoo ID may remain in our active server log files.

Anonymization/de-identification

- Anonymization is a process of removing or replacing personal identifiers in data records so that the resulting data is no longer personally identifiable. This is also referred to as de-identification. We use these terms interchangeably.
- Yahoo uses a multi-step process to replace, truncate, or delete identifiers in order to de-identify data. We are committed to continuous improvements and implementation of our data protection and de-identification measures.

Anonymization

- Yahoo's anonymization policy applies only to search log data.
- Yahoo stores this data in an identifiable form for up to 18 months.
- IP addresses within search user log data will be anonymized or deleted within 6 months from the time of collection.

Source: <https://policies.yahoo.com/xa/en/yahoo/privacy/topics/datastorage/index.htm>

IMAP server settings for Yahoo Mail

IMAP is the best way to connect your Yahoo Mail account to a desktop mail client or mobile app. It allows 2-way syncing, which means everything you do remotely is reflected in your Yahoo Mail account no matter where or how you access it. Here are the settings you'll need to configure your mail client or app.

Incoming Mail (IMAP) Server

- Server - *imap.mail.yahoo.com*
- Port - 993
- Requires SSL - Yes

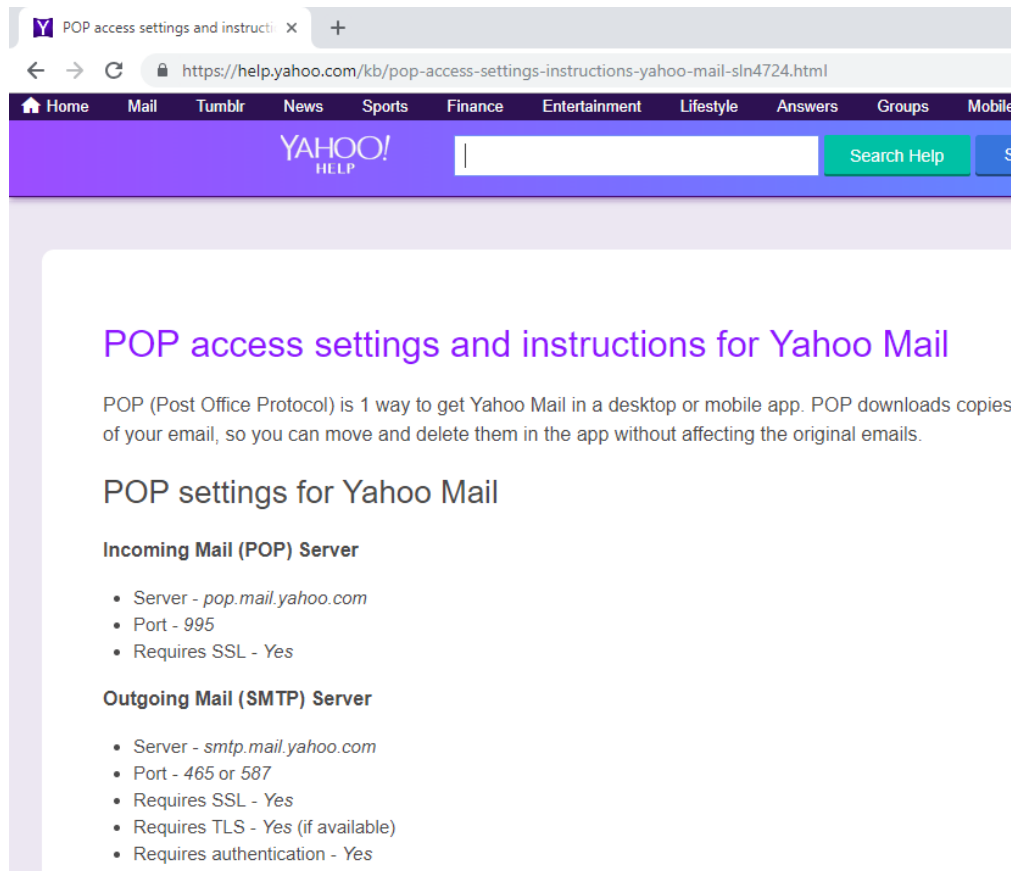
Outgoing Mail (SMTP) Server

- Server - *smtp.mail.yahoo.com*
- Port - 465 or 587
- Requires SSL - Yes
- Requires authentication - Yes

Your login info

- Email address - Your full email address (name@domain.com)
- Password - Your account's password
- Requires authentication - Yes

Source: <https://help.yahoo.com/kb/SLN4075.html>



Source: <https://help.yahoo.com/kb/pop-access-settings-instructions-yahoo-mail-sln4724.html>

24. Based on present information and belief, Yahoo makes, uses, sells and/or offers for sale a logical table identifying each registered connection available between physical devices and protocol conversion information required for each registered connection to convert messages of one protocol to a different protocol. Upon information and belief, Yahoo and/or its customers utilize Yahoo server and/or Yahoo.com server which comprise a logical table to identify the type of connection and selects Yahoo server and/or Yahoo.com server gateway to convert messages from SMTP to IMAP.

25. Based on present information and belief, Yahoo makes, uses, sells and/or offers for sale a dynamic database identifying the current status of each actual connection between physical devices. Upon information and belief, Yahoo and/or its customers utilize Yahoo server and/or Yahoo.com server which comprises a dynamic database to identify the current status of connection between the physical devices (including IP phones and the installation computers).

26. Based on present information and belief, Yahoo makes, uses, sells and/or offers for sale a virtual gateway accessing said knowledge base for protocol conversion information upon

receipt of a message to be transmitted between said virtual devices. For example, Yahoo and/or its customers utilize Yahoo server and/or Yahoo.com server comprising a virtual gateway which uses the Yahoo server and/or Yahoo.com server as a gateway for protocol conversion upon receiving the message to be transmitted between e-mail clients at sender end to the e-mail clients at receiver end via the Yahoo server and/or Yahoo.com server (“gateway”).

27. Based on present information and belief, Yahoo makes, uses, sells and/or offers for sale a virtual gateway converting the protocol of said message to a protocol compatible with the network to which said message is being sent. For example, Yahoo and/or its customers utilize Yahoo server and/or Yahoo.com server comprising a gateway which converts the SMTP protocol of the messages sent from Yahoo mail software at sender’s end (e-mail client) to the IMAP protocol used at receiver’s end (e-mail client).

28. Based on present information and belief, Yahoo makes, uses, sells and/or offers for sale a virtual gateway wherein said virtual gateway updates the protocol conversion information and the current status information in said knowledge base based on message traffic there through. Upon information and belief, Yahoo and/or its customers utilize Yahoo server and/or Yahoo.com server which accesses and updates the information stored in the registry based on the communicating virtual devices via the virtual gateway.

29. In the alternative, because the manner of use by Defendant differs in no substantial way from language of the claims, if Defendant is not found to literally infringe, Defendant infringes under the doctrine of equivalents.

30. Defendant’s aforesaid activities have been without authority and/or license from Plaintiff.

31. In addition to what is required for pleadings in patent cases, and to the extent any marking was required by 35 U.S.C. § 287, Plaintiff and all predecessors in interest to the ‘620 Patent complied with all marking requirements under 35 U.S.C. § 287.

32. Plaintiff is entitled to recover from Defendant the damages sustained by Plaintiff as a result of the Defendant’s wrongful acts in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that this Court enter:

1. A judgment in favor of Plaintiff that Defendant has infringed the '620 Patent;
2. A judgment and order requiring Defendant to pay Plaintiff its damages, costs, expenses, and prejudgment and post-judgment interest for Defendant's infringement of the '620 Patent as provided under 35 U.S.C. § 284 and an accounting of all damages not presented at trial;
3. An award to Plaintiff for enhanced damages resulting from the knowing, deliberate, and willful nature of Defendant's prohibited conduct with notice being made at least as early as the date of the filing of this Complaint, as provided under 35 U.S.C. § 284;
4. A judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding to Plaintiff its reasonable attorneys' fees; and
5. Any and all other relief to which Plaintiff may show itself to be entitled.

DEMAND FOR JURY TRIAL

Plaintiff, under Rule 38 of the Federal Rules of Civil Procedure, requests a trial by jury of any issues so triable by right.

Dated: December 3, 2018

Respectfully Submitted,

DEVLIN LAW FIRM LLC

/s/ Timothy Devlin

Timothy Devlin (No. 4241)

1306 N. Broom Street, 1st Floor

Wilmington, DE 19806

Phone: (302) 449-9010

Fax: (302) 353-4251

tdevlin@devlinlawfirm.com

Papool S. Chaudhari

(*Pro Hac Vice* application pending)

CHAUDHARI LAW, PLLC

P.O. Box 1863

Wylie, TX 75098

Phone: (214) 702-1150

Fax: (214) 705-3775

Papool@ChaudhariLaw.com

**ATTORNEYS FOR PLAINTIFF
BECK BRANCH, LLC**